

REMARKS

Claims 1-32 stand rejected. Reconsideration of the application is respectfully requested.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-32 under 35 U.S.C. § 103(a) as being unpatentable over Powers et al. (U.S. Pat. No. 6,460,103) in view of Fisher (U.S. Pat. No. 5,694,562) and Isensee et al. (U.S. Pat. No. 5,490,244). With regard to the independent claims, the Examiner stated:

Regarding claims 1, 6, 15 and 23, Powers teaches a keyboard (14) including features of the keyboard for rapidly responding to routine software requests. See col. 5, lines 9-11. Powers teaches at least one application launch Key (68) actuation of which causes a high level interrupt for opening or launching a specific user-configurable software applications. Powers also teaches that each of the keys carries an icon and further teaches rapid response keys (82, 84, 86, 88), which are additional special keys with specific purposes responding to a software request according to their assigned functions. See col. 6, lines 12-26, Fig. 3A and Fig. 4. In addition, Powers teaches the keyboard in connection to the computer console, a rapid Internet access array (70) a CPU (10, and a monitor (12). See col. 5, lines 55-57, Fig. 2 and Fig. 3A. However, Powers does not teach a keyboard including a display configurable to display a plurality of icons. Fisher on the other hand teaches a graphical user interface including a display (1) and key icons (2) such that the functions invoked by each key icon is presented as part of the interface display. See Fig. 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Power's keyboard to adapt fisher's key icons-display configuration. One would have been motivated in view of the suggestion in Fisher that graphical user interface as shown in Fig. 2 satisfies the desired keyboard which includes a display configurable to display a plurality of icons. The use of key icons-display configuration helps function a modified keyboard as taught by fisher.

Powers has been described above. However, Powers does not teach transmitting the icon from the monitor to the

keyboard. Isensee on the other hand teaches a transporter icon (200) enabling the user to transmit an object to a desired to a processing unit. The transporter icon also establishes a transmission channel between the object and the desired processing unit. See col. 2, lines 46-67.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Power's keyboard to adapt Isensee's transporter icon. One would have been motivated in view of Isensee that the transporter icon is functionally equivalent to the desired mechanism by which transmission of the icon from the monitor to the keyboard takes place. The use of transporter icon helps function a computer system with input/output peripheral devices as taught by Isensee.

Applicants respectfully traverse this rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining or modifying the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination or modification. *See ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination or modification includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *See Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

The present application is directed to a method and apparatus for displaying a plurality of icons on a user configurable keyboard to allow users to launch applications and uniform resource locators (URLs) that are displayed as icons on the keyboard. The keyboard includes a display screen, such as a liquid crystal display (LCD), for displaying user configurable icons proximate to a set of launch keys. Page 12, line 22 - page 13, line 2. The display screen on the keyboard may comprise any suitable display medium. Page 13, lines 2-3. The launch keys are user configurable to allow a user to program the desired application program invocation or URL in the computer system memory circuitry. Page 13, lines 3-6. Accordingly, independent claims 1 and 6 each recite a user-configurable keyboard comprising “a display configurable to display a plurality of icons.” Independent claims 15 and 23 each recite “selecting an icon from a system monitor,” “transmitting the icon from the monitor to a keyboard,” and “displaying the icon on the keyboard.”

In contrast, the Powers reference discloses a keyboard configured with dedicated keys that correspond to specific user feedback for a query from software. Col. 2, lines 10-15. The dedicated keys correspond to responses to routine software requests that may require a “yes,” “no,” “cancel,” or “close-and-save” response from the user. Col. 2, lines 18-22; col. 5, lines 9-11. Each of the dedicated keys carries indicia that is molded or printed onto the key, indicating the dedicated and sole function of that key. Col. 6, lines 12-15. Accordingly, the Powers reference discloses a keyboard having a plurality of preset and preconfigured keys that may be used to respond to routine software queries.

As stated by the Examiner, the Powers reference does not disclose or suggest a keyboard comprising “a display configurable to the plurality of icons,” as recited in claims 1-6. To provide the missing element in an effort to support a *prima facie* case of obviousness,

the Examiner cited the Fisher reference as disclosing a graphical user interface including a display (1) and key icons (2) such that the functions invoked by each key icon is presented as part of the interface display. The Fisher reference discloses a graphical user interface (GUI) screen display (1) that includes a menu (3) and key icons (2). Col. 2, lines 55-57. The key icons (2) correspond to the function keys on the keyboard. Col. 2, lines 56-60. The menu (3) lists various functions that may be invoked and associates each of the functions with a key icon (2). Col. 2, lines 56-60. However, in sharp contrast to the claimed invention, the display (1) of the Fisher reference is clearly *not* on the keyboard. Accordingly, the Fisher reference does not disclose a *keyboard* comprising a display configurable to display a plurality of icons, as recited in claims 1 and 6.

Nevertheless, the Examiner stated that it would have been obvious to one of ordinary skill in the art to modify the Powers keyboard to adapt Fisher's key icons-display configurations. Applicants respectfully traverse this assertion. At best, Fisher discloses modeling a portion of the keyboard (e.g., function keys) on a GUI screen display (i.e., a system monitor) that is *separate from* the keyboard. Contrary to the Examiner's assertion, there is nothing in the Fisher reference that would suggest modifying a *keyboard* to include a display configuration to display a plurality of icons. Without the improper use of hindsight, the existence of a GUI display screen that displays function key icons does not provide a basis for modifying a keyboard to include a display configurable to display a plurality of icons, as recited in the present claims. In fact, the Fisher reference essentially teaches away from the claimed invention. That is to say that rather than modifying a keyboard to include a display, the Fisher reference teaches exactly the opposite-modifying a display to include an iconic representation of a portion of a keyboard. Teaching away from the art is a *per se* demonstration of lack of *prima facie* obviousness. *In re Dow Chemical Co.*, 837 F.2d 469, 5

U.S.P.Q.2d 1529 (Fed. Cir. 1988). Accordingly, there is simply no suggestion in the Fisher reference to modify keyboard to include a display configurable to display a plurality of icons.

In view of the remarks set forth above, Applicants respectfully submit that neither of the cited references, either alone or in combination, discloses or suggests the elements set forth in claims 1 and 6, much less provides any suggestion to combine the disparate teachings to render the claimed subject matter obvious. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of claims 1 and 6, as well as those claims dependent thereon.

Independent claims 15 and 23 recite “selecting an icon from a system monitor,” “transmitting the icon from the monitor to a keyboard,” and “displaying the icon on a keyboard.” As stated by the Examiner, the Powers reference does not disclose these recited elements. The Examiner cited the Isensee reference as disclosing a transporter icon (200) to enable the user to transmit an object to a desired processing unit. As stated in the Background of the Isensee reference, a great demand exists for a mailing system that permits the user to establish the characteristics of an object-type only once. Col. 1, lines 32-34. This mailing system should permit the user to establish the mailing protocol and destination address for a destination only once. Col. 1, lines 34-37. Accordingly, the Isensee et al. reference discloses a system and method to permit the transmission of objects from one processing unit to another. Col. 1, lines 40-41.

Even if the objects disclosed in the Isensee et al. reference could be correlated with the icons recited in the present claims, it is clear that the Isensee et al. reference only discloses transmitting the objects from one processing unit to another processing unit. In contrast,

independent claims 15 and 23 recite transmitting an icon *from the monitor to a keyboard*. Indeed, while the Isensee et al. reference discloses a display 114 and a keyboard 116, it is clear from the specification that the Isensee reference does not disclose or suggest transmitting an object from the display 114 to the keyboard 116. Accordingly, the Isensee reference cannot possibly disclose transmitting anything between a monitor and a keyboard, much less “selecting an icon from a system monitor,” “transmitting the icon from the monitor to a keyboard,” and then “displaying the icon on a keyboard,” as recited in claims 15 and 23.

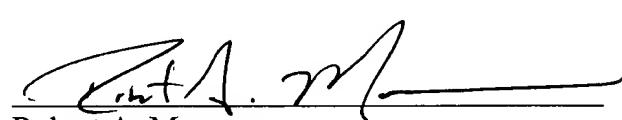
Neither of the references either alone or in combination discloses each of the elements recited in independent claims 15 and 23, much less provide any motivation or suggestion to combine these disparate teachings in the manner recited in the present claims. Accordingly, Applicants respectfully request withdrawal of the Examiner’s rejection and allowance of claims 15-23, as well as the claims dependent thereon.

Conclusion

In view of the remarks set forth above, Applicants respectfully request allowance of claims 1-32. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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